

Application Serial No. 10/643,187 - Filed August 19, 2003

IN THE ABSTRACT:

Please amend the Abstract as follows.

A semiconductor device has multilevel memory cells, each cell storing at least three levels of data each. ~~At least a first data composed of first data bits and a second data composed of second data bits are arranged in order that at least a bit of an N-order of the first bits and a bit of the N-order of the second bits are stored in one of the cells, the N being an integral number. A voltage corresponding to the N-order bits is generated and applied to the one of the cells in response to an address information corresponding thereto. Another semiconductor device has~~ The multilevel memory cells are arranged so as to correspond to a physical address space, each cell storing 2^n levels of data each expressed by n ($n \geq 2$) number of bits (X_1, X_2, \dots, X_n). A logical address is converted into a physical address of the physical address space. Judging A judgement is made as to whether a logical address space including the logical address matches the physical address space. When matched, the most significant bit X_1 is specified once using by performing a single comparison operation using a reference value. The specified bit is output from one of the cells corresponding to the physical address. If not matched, the bits (X_2, \dots, X_n) are specified by n-time specifying operation maximum using maximum n-number of performing multiple comparison operations using different reference values. The data writing/reading operations to/from the semiconductor devices can be stored in a computer-readable medium as program codes for causing a computer to execute these operations.